

636835

CENTRAL INTELLIGENCE AGENCY
INFORMATION REPORT

This material contains information affecting the National Defense of the United States within the meaning of the Espionage Laws, Title 18, U.S.C. Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

SECRET - U.S. OFFICIALS ONLY

| | | | |
|----------------|---|-----------------|------------------|
| COUNTRY | Czechoslovakia | REPORT | |
| SUBJECT | Great October Revolution Plant, of TOS Kurim, near Brno | DATE DISTR. | 2 September 1954 |
| DATE OF INFO. | | NO. OF PAGES | 10 |
| PLACE ACQUIRED | | REQUIREMENT NO. | RD |
| | | REFERENCES | 25X1 |

This is UNEVALUATED

THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.
THE APPRAISAL OF CONTENT IS TENTATIVE.
(FOR KEY SEE REVERSE)

25X1

1. The Great October Revolution Plant of TOS, Kurim, National Enterprise, is located north of Brno, in the vicinity of the town of Kurim, along the road to Kurim. The plant lies about 1,000-1,500 meters north of the Kurim railroad station, along the Kurim-Lipuvka road in an area 600 x 600 m. Approximately 600 meters north of the railroad station, a new road branches off. This new road runs parallel with the old one, to the east, at a distance of 50 meters. The old road is now used by pedestrians only. The southeast border of the site is 600 meters north of Zazruba forest. The northwest extremity of the new plant, not the old one which was bombed out during the war, is 600 m. to the northwest of the Zlobice wood. The original plant was double the present size, but the north part was completely bombed out and at present only the south part is in use.
2. The machines are in perfect working condition, because they are being operated by experts and properly maintained.
3. High-quality machine-tools are made at this plant, as follows:
 - a. High-speed lathe, type SVR -16: this type of lathe was the SVR-18, but changed to SVR-16 after certain improvements had been made. The new type has been produced since 1950. Monthly output is 60 units; turning length: 1,000 to 1,500 mm; height of turning centers, 16 mm; 2,400 revolutions per minute.
 - b. Several types of milling machines:
 - FV 24 - vertical milling machine.
 - FH 24 - horizontal milling machine.
 - FU 24 - universal milling machine.
 - FH 32 - horizontal milling machine.
 - FU 32 - universal milling machine.
 - FV 40 - vertical milling machine.
 - FH 40 - horizontal milling machine.

SECRET - U.S. OFFICIALS ONLY

| | | | | | | | | | | | | | | | |
|-------|---|------|---|------|---|-----|--|-----|--|-----|--|-------|---|--|--|
| STATE | X | ARMY | X | NAVY | X | AIR | | FBI | | AEC | | Other | X | | |
|-------|---|------|---|------|---|-----|--|-----|--|-----|--|-------|---|--|--|

(NOTE: Washington distribution indicated by "X"; Field distribution by "•")

SECRET - U.S. OFFICIALS ONLY

- 2 -

25X1

FU 40 - universal milling machine.
 FV 50 - vertical milling machine.
 FH 50 - horizontal milling machine.
 FU 50 - universal milling machine.
 Numbers 24, 32, 40, and 50 indicate numbers (degree) of cones in the spindles. Milling machines with ISA cones (American) are also produced. Monthly capacity is 60 to 80 units. The production of any particular type depends on orders. Sometimes only one series of a certain machine is made and further production is left to other plants.

- c. Automatic machines: Since 1949, the plant has been specializing in the production of automatic machines, but this does not interfere with the output of lathes and milling machines. Automatic machines are combined multi-spindle machines suitable for specific production processes; e.g., the plant made a machine for the production of tractor-heads, on which the complete head can be machined in a single operation. The output of automatic machines depends on orders placed by other factories. The ordering factory only supplies a drawing of the machine and construction engineers of the Kurim Plant take care of the design and construction.
- d. Accessories for all types of machines are also made in the plant, such as indexing devices for milling machines, rear rests, form-turning rests, collet chucks, and turning centers for lathes.
4. Deliveries to the USSR amount to 50 to 60% of total production. The rest goes mainly to new plants in Czechoslovakia. Only a small percentage is for other satellites. Deliveries of spare parts are usually very slow and sometimes take over nine months. Deliveries of machines are also irregular owing to the shortage of steel, and because deliveries to the USSR have top priority. In case of single machines, the usual delivery time is from five to six months.
5. From the precision point of view the machines are qualitatively very good. The cast iron parts, such as lathe and milling machine bearings, present the main problem. Previously, they used to be left in the open for as long as two years and allowed to "season", but they are now machined and fitted immediately. As a result, the process of seasoning continues in the machine, causing seizures of lathe bearings or inaccuracies of as much as two tenths of a millimeter overnight.
6. Red iron, shaped iron, and steel are supplied by the foundries. Castings are made at the plant. Material is often defective. All material is brought in by rail.
7. The number of employees is 2,000, of whom 400 to 500 are technical employees including controllers, managers, workshop managers, constructors, employees of the research department, etc. The standard of the technical staff is very high. 15% of the employees are auxiliary laborers and women. Most employees have been working at the factory for several years. Working morale is high and workers are trying to fulfil targets. About 50% of employees live in Brno and commute by train or by bus. All mechanical workshops work three shifts. The number of shifts in the assembly hall depends on the amount of work. Sometimes one or two overtime shifts have to be worked.
8. The Five-Year Plan is being fulfilled 100% and sometimes more.

SECRET - U.S. OFFICIALS ONLY

SECRET - U.S. OFFICIALS ONLY

- 3 -

25X1

Many Communist technical experts have taken up better positions elsewhere. Among them were: Petr Kadlec; Frantisek Zelinka, now restaurant manager of Communal Enterprises in Brno; and Antonin Svabensky, head official at the Wages and Labor department at Lisen, a notorious loafer.

25X1

10. Electricity is supplied by the Rosice-Oslavany Power Plant. Water comes from the water-works at Hradcany near Tisnov, which belong to the plant.
11. The factory guards, 20 men, are armed with pistols. The factory militia, about 40 to 45 members, is not considered reliable, because the majority enlisted only out of fear. Until January 1953, there were no Interior Guards at the plant.
12. Houses for employees were built after the war on the east side of the road leading to the plant on the north edge of Kurim. There are seven three-story blocks of apartments, each 60 x 18 meters. Another workers' settlement is in the vicinity of the forest called 'Manova', on the east side of the Praha-Brno highway, south of the point where the road from the plant joins this highway. This settlement is known as "Hamburg", because German workers lived there during the war.

SECRET - U.S. OFFICIALS ONLY

SECRET - U.S. OFFICIALS ONLY

- 4 -

25X1

Legend to the sketch of the Plant at Kurim (Annex A):

1. Fence surrounding the whole plant, a 50 cm, high concrete wall with wires on top.
2. Entrance for pedestrians from the old road and entrance for vehicles from a connecting road which branches off the new road.
3. Wooden bus garages, 20 x 10 meters, outside the factory enclosure.
4. Brick house for guards, 12 x 8 meters. Next to it are brick garages for factory trucks, 12 x 8 meters.
5. Railroad siding, from the main tracks Brno-Tisnov. It leads from the railway station at Kurim as a single track along the west side of the road to the plant.
6. Concrete roads through the plant.
7. Production hall No. 16, 100 x 80 meters of reinforced concrete. It is an old hall, bombed out during the war and repaired. Spare parts for almost every machine are made here.
8. Production hall No. 8, 100 x 80 meters, reinforced concrete for assembly and production of large spare parts.
9. Foundry, reinforced concrete, 60 x 80 meters. It was repaired in 1952 and the Vankovka foundry of Brno was moved into it.
10. One-floor building, 60 x 16 meters, management offices.
11. Hall No. 14, used as stores and cutting shop. In its north part is the smithy and the welding shop. The hall is of reinforced concrete, 100 x 40 meters. There are loading ramps along its east and west sides.
12. Assembly hall for automatic machines; reinforced concrete, 70 x 70 meters.
13. Former store, still in ruins. Near it is the platform where workers may board the commuters' train which comes right into the factory. This platform is also used as a loading ramp. Size of the store: 120 x 40 m.
14. Boiler house, 40 x 40 meters, with a 15 meter high chimney, its lower part of concrete, the upper of metal. On the south side is a 60 meter long concrete trough for coal dust. Loading of coal is by automatic conveyor.
15. Kitchen, dining room and a room for meetings, wooden, two-story, 50 x 40 m.
16. Brick pigsty, 15 x 10 meters in size.
17. Gardener's house, brick, 8 x 10 meters. Part of the northwest corner of the factory grounds is used for vegetable gardens.

SECRET - U.S. OFFICIALS ONLY

SECRET - U.S. OFFICIALS ONLY

- 5 -

25X1

Legend to the sketch of Production Hall No. 16 (Annex B):

1. Entrance.
2. Tempering and hardening shop, about 20 meters wide.
3. Store of poisons and salts used in hardening process.
4. Row of offices and a smaller hall with hardening control apparatus.
5. Hardening control department, surrounded by wire with two hand-operated presses for straightening spare parts after hardening, and one Rockwell press for hardness-testing.
6. Furnace for high-frequency hardening, of Czech origin, probably Wolmann type.
7. Line of eight hardening and tempering furnaces.
8. Water basin for cooling.
9. Workbenches.
10. Repair and maintenance shop with a lathe, milling machine, grinding machine, drilling machines, and several workbenches.
11. Intermediate stores of material.
12. Entrance through which material is transported.
13. Ground floor: offices of production departments. 2nd floor: cloakrooms and lavatories.
14. A small hall near the entrance with a flight of stairs leading to the second floor; on the far end of the hall is a guardroom where all incoming persons are checked.
15. Dining-hall, used in winter only.
16. Canteen.
17. Tool-issue shop.
18. Control department and office of the tool-issue shop.
19. Corridor not in use, usually closed.
20. Belt-maker's shop.
21. Fuel and grease store.
22. Shop with one compressor and steam-regulating equipment.
23. Tool shop.
24. Apprentices' workshop.
25. Machine tools in the apprentices' shop: 12 lathes of various makes; 10 milling machines, most of them of Czech production; 7 grinding machines; 2 drilling machines; 1 block for marking castings. These machines serve for training purposes only and are not used in actual production.
26. Tool-sharpening shop with 30 grinding machines, separated by wire netting from the control department.
27. Actual tool shop.
28. Department in the tool shop with 3 coordinate drilling machines used for precision drilling of pitch diameters. All are made in Switzerland.
29. Four universal small-size milling machines, for precision-cutting and drilling, German type Deckel - in the same dpt. of the tool shop.
30. Four workbenches.
31. Two lathes for milling cutters, German production.
32. Eight milling machines, TOS type.
33. Control room of the tool shop, enclosed by a wire partition.
34. Eight lathes, types TOS and WOLMANN.
35. TOS grinding machine for sharpening cutters.
36. Five grinding machines for borehold and surface grinding, of TOS-Kamenicek make.
37. Thread-cutting machine, foreign make.
38. Machine-parts balancing apparatus.
39. Screw shop, 15 meters wide.
40. Five lathes of large turning length.
41. Four screw-cutting main screws for machine-tools, foreign makes.

SECRET - U.S. OFFICIALS ONLY

SECRET - U.S. OFFICIALS ONLY

- 6 -

25X1

42. Workbench and a grinding machine.
43. Exit.
44. Measuring-apparatus control room, with two large Swiss micrometers and other measuring instruments.
45. Workshop offices.
46. Electrical maintenance shop, next to the main entrance, the guardroom and the staircase leading to the second floor. On the second floor above the main entrance is the ammunition store of the factory militia; also the construction department of the tool shop and various technical and administrative offices.
47. Two large pillar drilling machines, MAS type.
48. Eight horizontal drilling machines of various types.
49. Two lines of grinding machines for surface and form grinding, 12 machines, mainly TOS make.
50. Ten grinding machines, mainly of Czechoslovak production, in two rows, for grinding boreholes.
51. Six surface grinding machines, large, mainly of Czechoslovak production.
52. Six lathes in two rows. 2 Sherer, 3 Sur (Skoda), 1 TOS, used for machining large parts.
53. Four blocks for marking castings.
54. 12 capstan lathes, various makes.
55. Grinding machine for sharpening cutters.
56. Foremen's desks.
57. Workshop controls. Three controls for every row of machine tools, on both sides of the passage.
58. 28 lathes in three rows, TOS-Kurim, types SVR 16 and SVR 18, mostly new.
59. One block for marking castings.
60. Two grinding machines for boreholes.
61. compressed-air lathes. Machining is done by templates 25X1
62. TOS lathe.
63. Two drilling machines, one type CZ, the other, larger one, a Skoda. Both are used for drilling long boreholes in spindles of lathes and milling machines.
64. 20 milling machines, Czechoslovak production, in two rows.
65. German thread-cutter for cutting threads inside boreholes.
66. Small bench planing machine. The bench is about 2 1/2 meters long.
67. Four shaping machines.
68. One block for marking castings.
69. Three one-spindle drilling machines, one multi-spindle machine, Czechoslovak production.
70. Three slotting machines, foreign makes.
71. Three grinding machines for grinding spindle shafts.
72. TOS grinding machine for grinding lathe cutters.
73. Two rows of TOS lathes.
74. Gear-cutting machine, Klingenberg make.
75. The two last rows are mainly gear-cutting machines of foreign makes, chiefly Harbeck.
76. Three grinding machines, foreign makes, for grinding cog wheels.
77. Gear testing machine, old, foreign make.
78. Three foremen's desks.

SECRET - U.S. OFFICIALS ONLY

SECRET - U.S. OFFICIALS ONLY

- 7 -

25X1

Legend to the sketch of Production Hall No. 8 (Annex C):

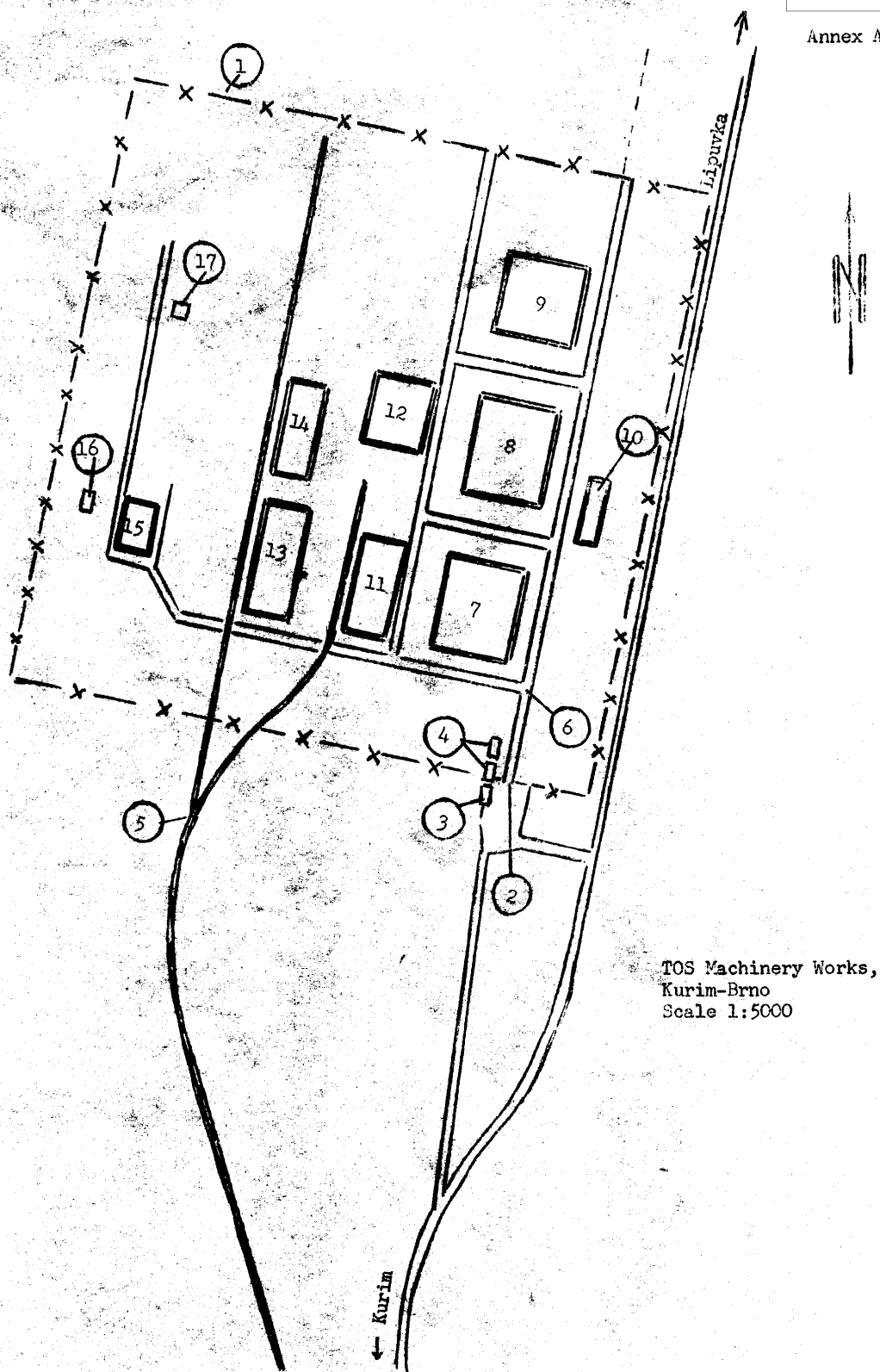
1. Entrance for workers.
2. Hall and staircase to the second floor. Guardroom is by the staircase. On the second floor is a group of offices, 12 to 15 meters wide.
3. Offices of foremen, shop managers, controllers, etc., and a lavatory.
4. Entrance, not in use.
5. Laboratory and testing department.
6. Three TOS lathes for testing parts of machines and tools.
7. Three milling machines, TOS, used also for testing as above.
8. TOS drilling machine.
9. Universal grinding machine, TOS-Kamenicek make.
10. Hydraulic press.
11. Work benches.
12. Control office with various measuring instruments, inside the laboratory. All instruments are in a perfect working order, because they are replaced after every series of tests. Durability, capacity, and other properties of newly designed machine tools are tested here.
13. The west part of the hall is two-story and 12 to 15 meters wide. On the second floor are lavatories and cloakrooms. In the first room in the northern corner are heat regulators and a compressor.
14. Fuel and grease store for assembly.
15. Entrance, not in use.
16. Tool-issue shop.
17. Store of finished parts for assembly.
18. Second entrance with a guardroom and a staircase leading to the cloakrooms.
19. Joiners, varnishing, and other shops.
20. Three large combined machines (planing, milling, and grinding machine), probably of German origin, used for machining large castings, e.g., lathe and milling machine beds and benches.
21. Three combined machines, smaller than no. 20. Foreign makes, used only for planing smaller parts.
22. Four horizontal drilling machines, foreign make, for drilling large boreholes, e.g., lathe spindle heads.
23. Four large milling machines, TOS make.
24. TOS grinding machine for sharpening milling cutters.
25. Four large pillar drilling machines, Czechoslovak MAS make.
26. Four heavy lathes, Skoda-Sur make, new.
27. The assembly shop is divided into three sections by four lines of workbenches. Above every section is a crane, capacity 50,000 kg. Workbenches with smaller electrical drilling machines. Various auxiliary equipment for assembly.
29. On every workbench are two TOS lathes.
30. Two milling machines.
31. A drilling and a grinding machine, both TOS, used for sharpening tools.

25X1

(41)

SECRET - U.S. OFFICIALS ONLY

25X1
Annex A



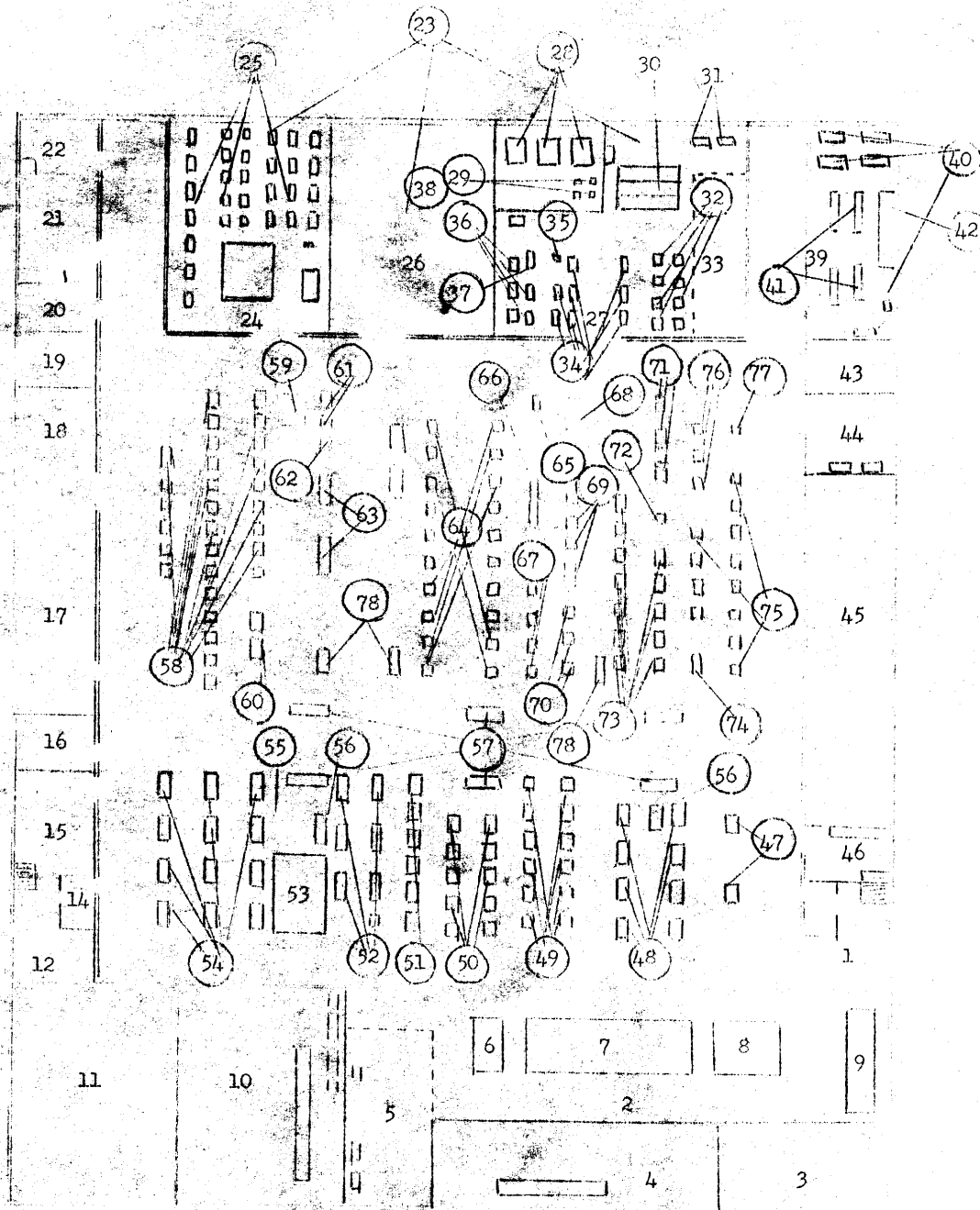
TOS Machinery Works,
Kurim-Brno
Scale 1:5000

SECRET - U.S. OFFICIALS ONLY

SECRET - U.S. OFFICIALS ONLY

25X1

Annex B



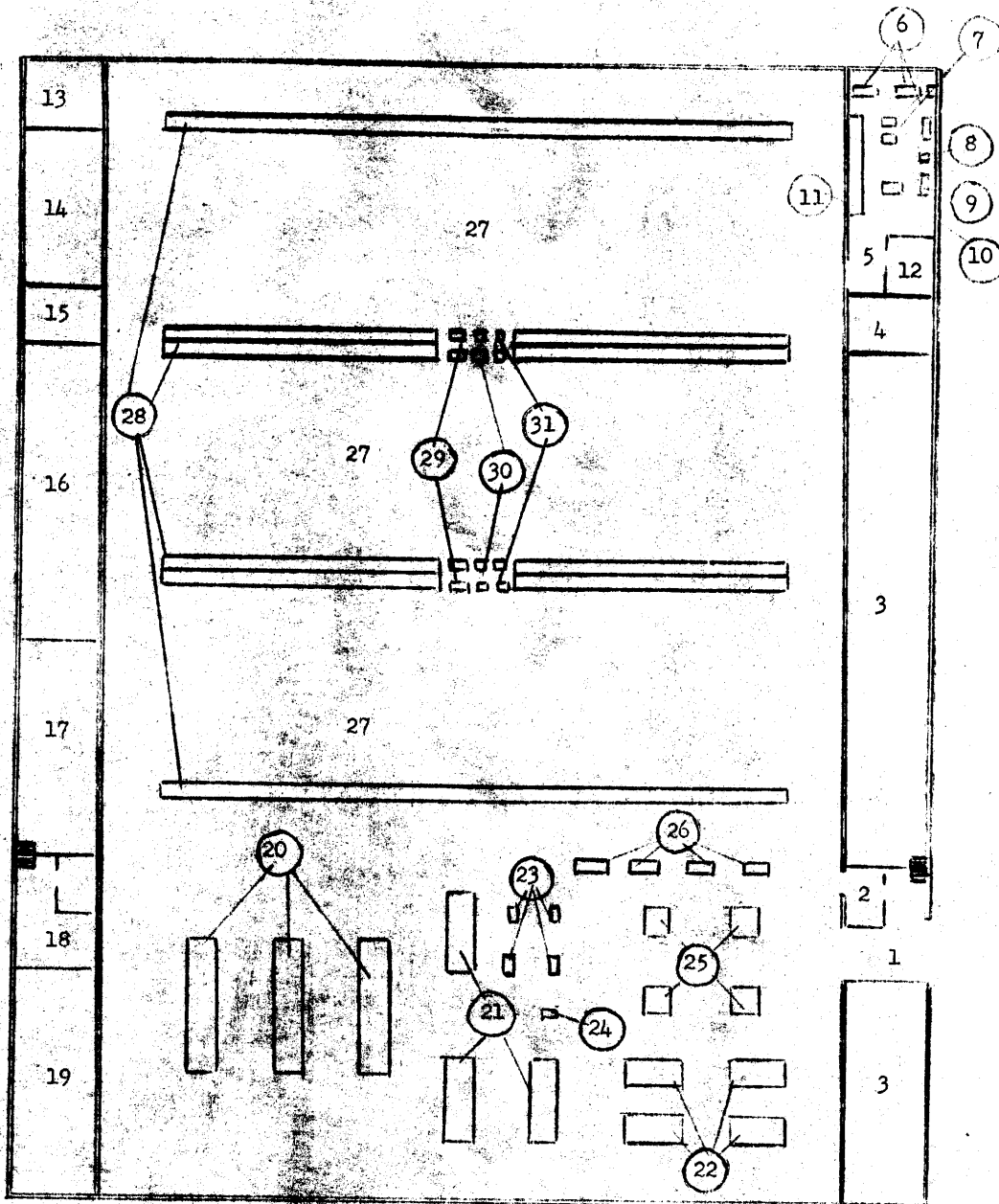
Scale 1:500

SECRET - U.S. OFFICIALS ONLY

SECRET - U.S. OFFICIALS ONLY

Annex C

25X1



8

Scale 1:500

SECRET - U.S. OFFICIALS ONLY